

# United States Patent and Trademark Office



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,303	09/26/2001	James E. Lindemuth	H1799-00075	9930
7590 01/21/2004			EXAMINER	
DUANE, MORRIS & HECKSCHER LLP One Liberty Place Philadelphia, PA 19103-7396			PATEL, NIHIR B	
			ART UNIT	PAPER NUMBER
,			3743	
			DATE MAILED: 01/21/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		<b>\$</b>				
	Application No.	Applicant(s)				
	09/964,303	LINDEMUTH ET AL.				
Office Action Summary	Examin r	Art Unit				
	Nihir Patel	3743				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM						
THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply.  - If NO period for reply is specified above, the maximum statutory period volume.  - Failure to reply within the set or extended period for reply will, by statute.  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE and this communication, even if timely filed	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on Nov	<u>rember 28<sup>th</sup>, 2003</u> .					
2a)☐ This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4) Claim(s) is/are pending in the application.						
4a) Of the above claim(s) is/are withdra	wn from consideration.					
5) Claim(s) 17-24 is/are allowed.						
6)⊠ Claim(s) <u>2 and 4</u> is/are rejected.						
7)⊠ Claim(s) <u>5-16</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ acce	pted or b)⊡ objected to by the Exa	miner.				
Applicant may not request that any objection to th						
11) The proposed drawing correction filed on	_ is: a)□ approved b)□ disappro	oved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
<ol> <li>Certified copies of the priority document</li> </ol>	s have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				
U.S. Patent and Trademark Office		Port of Banor No. 0				

Application/Control Number: 09/964,303

Art Unit: 3743

#### **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments, see page 8, filed on November 28<sup>th</sup>, 2003, with respect to claims 2 and 4-24 have been fully considered and are persuasive. The previous office action has been withdrawn.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is insufficient antecedent basis for limitations "the canister".

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Murase et al.

US Patent No. 4,982,274. Referring to claim 2, Murase discloses a heat pipe type cooling apparatus for semiconductor that comprises a first heat pipe 11 having an evaporator and a condenser, the first heat pipe being mounted with the evaporator inside the canister and the condenser outside the canister; a second heat pipe having an evaporator thermally coupled to the

Page 3

Art Unit: 3743

condenser of the first heat pipe, the second heat pipe having a condenser, and means for dissipating heat from the condenser of the second heat pipe (see figure 2A).

Referring to claim 4, Murase discloses a heat pipe cooling apparatus for semiconductor that comprises a first heat pipe having an evaporator and a condenser, the first heat pipe being mounted with the evaporator inside the canister and the condenser outside the canister; a second heat pipe having an evaporator thermally coupled to the condenser of the first heat pipe, the second heat pipe having a condenser; a third heat pipe having an evaporator thermally coupled to the condenser of the second heat pipe, the third heat pipe having a condenser; and means for dissipating heat from the condenser of the third heat pipe (see figure 2A).

## Allowable Subject Matter

4. Claims 5 through 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 17 through 24 are allowed.

Henny Bennett Supervisory Patent Examiner Application/Control Number: 09/964,303 Page 4

Art Unit: 3743

## Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Nihir Patel whose telephone number is (703) 306-3463. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful the examiner supervisor Henry Bennett can be reached at (703) 308-0101.

NP

January 15, 2003